

Claims

Sub A.1

1. An electrical connector assembly comprising:
a first connector having a first insulating
5 housing with first contacts, and a first shielding shell
that is externally mounted on first insulating housing,
a second connector mated to the first connector,
the second connector having a second insulating housing with
second contacts, and a second shielding shell that is
10 mounted on the second insulating housing,
the first connector has a latching arm with a
first engaging part, the first engaging part has electrical
continuity with the first shielding shell,
the second connector has a second engaging part
15 which has electrical continuity with the second shielding
shell, the second engaging part engages with the first
engaging part of the latching arm to provide a locking and
electrical engagement therebetween, and
the first and second shielding shells respectively
20 have a plurality of first and second contact parts which are
disposed in the direction perpendicular to the mating
direction of the first and second connectors, the first and
second contact parts contact each other when the first and
second connectors are mated with the first engaging part of
25 the first connector and the second engaging part of the
second connector form a portion of the first and second
contact parts, whereby the plurality of the first and second
contact parts as a whole are disposed at equal intervals in
the direction perpendicular to the direction of mating of
30 the first and second connectors.

2. The electrical connector assembly as recited in
Claim 1, wherein the contact parts of the second connector
are spring contacts that protrude from the second shielding
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shell of the second connector toward the first shielding shell of the first connector.

3. The electrical connector assembly as recited in Claim 2, wherein the first contact parts of the first
5 connector are contact surfaces of the first shielding shell that contact the spring contacts of the second connector.

4. The electrical connector assembly as recited in Claim 1, wherein the latching arm is made of metal, the
10 first engaging part of the latching arm is an engaging hole that is formed in the latching arm.

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15 5. The electrical connector assembly as recited in Claim 4, wherein the second engaging part of the female connector is an anchoring projection which is caused to protrude from the second shielding shell, the anchoring projection engages the engaging hole.

20 6. An electrical connector comprising:
an insulating housing that holds contacts, a shielding shell that is externally mounted on the insulating housing, and a locking part that is disposed on the outside of the shielding shell for engagement with a mating connector,

25 the locking part has a metal latching arm whose front end is fastened to an end portion of the shielding shell, and whose rear end is held so that the rear end can slide on a surface of the shielding shell, the latching arm has an engaging part which is located near the front end part of
30 the latching arm, the engaging part cooperates with a mating engaging part of the mating connector, the latching arm has a pressing part which is located on the rear part of the latching arm.

7. An electrical connector assembly as recited in Claim 6, wherein the latching arm of (the locking part) ^{sub} has a shallow inverted shape.

⁵ Sub A3 8. The electrical connector as recited in Claim 7, wherein the engaging part of the latching arm which has an engaging hole that is formed in the forward-facing surface of the latching arm.

10 9. The electrical connector as recited in Claim 8, wherein the pressing part is the rearward-facing surface of the latching arm, the pressing part is inclined toward the rear of the latching arm.

15 10. The electrical connector as recited in Claim 9, wherein a covering enclosure is formed on the outside of the shielding shell with the end portion of the shielding shell exposed, the covering enclosure has a finger-catch part on the rearward-facing surface that makes it possible to push
20 the rearward-facing surface.

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